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ABSTRACT

This historical review of the literature addresses the relationship between spoken and written language with respect to: (1) comparison and contrast of features; (2) the instructional program; and (3) the contributions of research. The review includes direct quotations of researchers in describing the studies to preserve each researcher's personal interpretation of the individual investigation. It concludes that the relationship between oral and written language through an examination of similarities and differences and the search for the most effective teaching approaches to accommodate each of the language modes would continue as a major focus in language arts instruction. The purpose of the historical review is to provide a wide perspective to the changing pace, content, and style of instruction and practice. (Contains a 47-item bibliography of research published between 1925 and 1969.) (NKA)

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SUMMARY #3: REVIEW OF HISTORICAL RESEARCH

The Relationship Between Oral and Written Language

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The Relationship Between Oral and Written Language

The Historical Review of the Literature to 1970, has to this point been concerned with the development and characteristics of oral language (Summary #1) and the development and characteristics of written language (Summary #3) as distinct forms of language.

Attention is now given to the relationship between spoken and written language with respect to (1) comparison and contrast of features, (2) the instructional program, and (3) the contributions of research.

Following the pattern of the Historical Review #1 and #2, direct quotations of researchers will be included in describing the studies to preserve each researcher's personal interpretation of the individual investigation.

Concluding Note:

The relationship between oral and written language through an examination of similarities and differences and the search for the most effective teaching approaches to accommodate each of the language modes would continue as a major focus in language arts instruction.

The purpose of the historical review of the literature is to provide a wide perspective to the changing pace, content, and style of instruction and practice.

The Features of Spoken and Written Expression

Hockett (1966) in defining universal properties of language, distinguishes between spoken language and writing as a basis for considering them separately: (1) Spoken language is part of the *"common denominator of cultures"* (14) and its antiquity is undisputed. Writing is a recent invention and has not yet spread to all human communities. (2) One crucial design feature of writing systems is relative permanence, the exact opposite of the rapid fading characteristic of spoken language. (3) Writing

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systems are quite varied in their designs so that it is difficult to be sure just what features are common to all.

According to **Carroll** (1964), writing is a system of communication that has a special relationship to spoken language in that it depends largely on the prior existence of spoken language. Written language, then, must always be regarded as spoken language *"written down in a particular, conventionalized writing system and phrased often in a special written style"* (3). Studying the structure of the language solely in its written form, **Carroll** contends, although useful for some purpose, has its limitations since writing totally ignores the sound system of the language and its possible effects on the structure.

Sapir (1921), explains that written language is a *"point-to-point equivalent"* to its spoken counterpart. He describes written forms as secondary symbols of the spoken ones and are therefore symbols of symbols. **Sapir** offers a familiar example of linguistic transfer: *"The Morse telegraphic code in which the letters of written speech are represented by a conventionally fixed sequence of longer or shorter ticks. In this instance the linguistic transfer takes place from the written word rather than directly from the sounds of spoken speech. The letter of the telegraph code is thus a symbol of a symbol of a symbol"* (20).

Vygotsky (1926) found that the development of writing does not repeat the developmental history of speaking. He states that written speech is a separate linguistic function differing from oral speech in both structure and mode of functioning. Writing, he claims, requires a high level of abstraction since it is speech in thoughT and image only. In learning to write, **Vygotsky** explains, the child must disengage himself from the sensory aspect of speech and replace words by images of words. It was observed in the

Vygotsky studies that the abstract quality of written language, not the underdevelopment of small muscles which constitutes *"the main stumbling block"* (99). **Vygotsky** also notes the deliberate analytical action which writing requires of the child: be aware of the sound structure of each word, dissect it, and reproduce it in alphabetical symbols, which have been studied and memorized before. **Vygotsky** presents his theory that inner speech follows oral speech (Piaget, 1926), claiming that inner speech, in egocentricity, precedes oral speech while written speech follows inner speech. He contends that the change from compact inner speech to detailed written speech to structure meaning is the source of difficulty for the school child. **Vygotsky** explains that the discrepancy between oral and written language development is caused by the child's proficiency in spontaneous activity (oral) and his lack of skill in abstract deliberate activity (written). He suggests that according to research, the psychological functions on which written speech is based have not begun to develop in the proper sense when instruction in writing starts.

Bruner (1966) explains that while the skills of speaking and listening precede those of reading and writing, there is often a lag of from 6 to 8 years between the child's *"linguistic age"* (111) in writing and in speaking. He refers to **Vygotsky** who suggested that writing and reading are *"second order"* abstractions since spoken speech has the advantage of a reference present as well as the *"steering"* (111) provided by the social demands of the dialogue while a written word stands for a spoken word used in any context. **Bruner** explains *"whoever uses written speech must detach himself from immediate social interaction altogether and conjure up in his own mind a situation appropriate to the written words with which he is dealing"* (111). On the other hand, following this view of detachment and separation from immediate dialogue,

Bruner suggests that *"to become aware of what one has written requires that one hear it, listen to it, compare the spoken with the written version"* (111).

Dozier (1963) identifies the two concepts that are held by linguists with respect to language: the first is that writing is derived from speech; the second concept about language is that all languages in their spoken forms are structured systems. The linguists, therefore, study the spoken language and analyze speech through the discipline termed structural linguistics. He notes, moreover, that a writing system remains *"comparatively stable"* (4) once devised while speech changes, creating a discrepancy between any orthography and the spoken language. Or, as **Potter** (1967) observes that *"our writing is not merely a graphic record of English as she is spoke"* (2).

Fodor (1964) concludes from the maturational development of speech that natural languages differ little in terms of complexity when regarded from a developmental point of view. He compares the speaking with writing in that writing does not develop automatically at a specific age, while writing systems themselves differ in degrees of difficulty as they have been developed by various cultures. The implications of research (Hunt, 1965) on writing progress through the acquisition of syntactic structures, suggest that a child must learn anew for writing the ability to produce some of the structures which he handles easily in speech (Whipp, 1969). Writing, **Dixon** (1967) offers is the medium of school while speech is the medium of home. **Lamb** (1967) claims that a child can never write anything which he cannot think or speak and the earliest experiences he has in translating his spoken words into written symbols builds upon his ability to use the patterns of his native language. In the longitudinal study of comparing oral and written language from first through third grades, first grade was established as the beginning of those experiences (Sandel, 1970).

Major Investigation

The earliest comparative investigation was undertaken by **Lull** (1929) who, in comparing oral and written language, stated that *"In general we know without testing that the children in the primary grades express ideas better through speaking than writing; and yet even here it is probable that in the third grade at least, some pupils will be found to write as well or better than they speak"* (73). The subjective nature of **Lull's** evaluation of the results prevents a comparison with recent studies. **Lull's** procedures however, included interesting points. The 350 pupils in grades 1-8 were divided into two testing groups. In one group the children spoke before they wrote; in the second group they wrote before they spoke. *"This arrangement gave his (the child's) writing the advantage of having spoken first in series one, and his speaking the advantage of having written first in series two"* (25). This procedure is similar to the Sandel study. The topics of their own choice were selected from the general sources of materials in their classes, *"history, civics, geography, and nature study were chosen as the basis for the spoken and written themes because of their great interest to the children"* (75). **Lull** stated *"it was essential that each pupil should have the highest degree of interest and motive for speaking and writing upon his topic"* (74). The more recent studies of the topic as a variable reported earlier support **Lull's** statement, although there is different emphasis on interest areas. The *"motive"* for speaking and writing also places stresses on the aspect of communication. **Lull** reported that the transition from greater excellence in spoken discourse to greater excellence in written discourse took place between the 4A grade and the 5B grade with a steady, comparative gain in written expression through grade 7B. The comparable items of evaluation were content (clarity of thought), grammar, and diction (word usage).

In the studies by **Martin** (1957 and **Winter** (1958) described below, there was little correlation between and amongst the variables, suggesting individual developmental patterns for each variable. In the **Winter** study however, the two vocabulary measures, total length of response and number of different words used were found to be highly dependent upon each other. These measures continue to be used in studies of children's writing.

Martin (1955) investigated the developmental interrelationship among language variables in children of the first grade. **Martin** cited evidence in this study to indicate that at the first grade level, growth in each language variable followed an individual developmental pattern and was unrelated to other variables. She described a *"zig-zig pattern of development"* (171) which suggests that parallel development in the language variables should not be expected.

Winter (1957) reported the results of the interrelationships among language variables in second-grade children who were in the first-grade sample in the **Martin** study (1955). The oral language of each child, in a show and tell situation, was recorded by wire recording, transcribed and analyzed to determine the total number of words used, the number of different words used, and the average length of sentences. Writing measurements, considered as handwriting in this study, were obtained by comparing the samples of manuscript writing with the Metropolitan Primary Manuscript Handwriting Scale. At the end of the second year there was a high degree of constancy of the relationships among the language factors; but only the two vocabulary measures (total length of response and the number of different words used) were found to be highly dependent upon each other. It was implied that the negligible relationship found between reading and the two measures of oral language indicated that learning to read

has little or no dependence upon oral language as tested in children's show and tell situations. Later studies comparing children's oral language with the materials of reading instruction (Strickland, 1962, Riling 1965) were to suggest different explanations of the Winter observation in revealing a lack of relationship between the language structure of the child and those of his reader. **Winter** suggests that if writing activities are delayed until some skill has been achieved in reading, when the child begins to write and to read his own writing *"the two may strengthen each other"* (110). At the end of grade two a small stable relationship between writing and the two vocabulary factors or oral language were reported in several of the individual case studies. Since the children who were writing original stories and letters were also making rapid progress in their oral vocabulary, **Winter** further suggests that if writing is delayed until children have developed an oral vocabulary *"sufficient for putting their own thoughts into written form the quality of writing will be better because of the interest in recording those ideas"* (111). Children's oral language competency recognized earlier in the review of the literature (Summary #1) has suggested expectations of writing at the first grade level.

Harrell (1957) investigated the relationship of oral and written language expression of 320 children chosen from four age levels, 9, 11, 13, and 15, selected from fourth, sixth, eighth, and tenth grade. The ratio of subordinate clauses to the total number of clauses was used as the principle measure in studying the relationship. To collect the written stories, groups of children were shown a short movie and asked to write the story of the movie. A similar but different movie was shown to obtain the oral stories. The results indicated that children used more subordinate clauses in writing than in speaking, and that this difference increased with advance in age; children used more

adverb and adjective clauses in their writing, but used a greater percentage of noun clauses in speaking; children used a greater percentage of all types of adverbial clauses with the exception of clauses of time and cause in their speech. A correlation was found between the subordination index in written stories and CA, MA, IQ, and occupational status. **Harrell** also concluded that there was no indication that for any of the measures used a mature level had been reached in either written or oral stories. **Harrell** noted that in the studies of the development of language in the individual, the studies of younger children have been concerned with oral language while the studies of language in older children have been principally concerned with writing. The course of language development, therefore, was based *"on the speech of the preschool child and the writing of the school child"* (5). **Sandel** (1977, 1978) investigated both forms of language development concurrently from the earliest point of juncture in first grade. It seems significant to note **Harrell's** explanation of the choice of fourth grade as the beginning level in his study. *"Children in the third grade were not included for two reasons: (1) A representative sample could not have been obtained since many would not have been able to write well enough; and (2) their stories would probably not have been long enough to yield reliable measures. Therefore, the lowest grade for which children were taken was the fourth"* (13). This is substantially the same explanation presented by **Hunt** (1965). **Harrell** reported a consistent gain with increasing age for both written and oral stories. At each of the four age levels, oral stories were found to be longer than written stories.

Eldredge (1965) compared language patterns used by third-grade children in oral and written composition. The study was patterned on the longitudinal study of the language of elementary school children by **Loban** (1963). Samples of oral language

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were recorded on tape and four samples of written language were obtained in a group situation in the classroom. Four different still pictures and four different unfinished stories supplied motivation for speaking and writing. The language samples were analyzed according to the procedures described in the **Loban** study. The results indicated that at the third-grade level the written language reflects the same patterns of usage found in oral language. The third-grade children excelled in oral language with age, IQ, and socioeconomic status having a significant relationship to proficiency.

From the part of his study which compared oral and written language, **Loban** (1963) concluded that instruction can do more than it has with oral language since many pupils who lack skill in using speech will have difficulty in mastering written tradition. **Loban** reports that in successive years of his study pupils who ranked high in their use of oral language also perform well in writing and reading.

In a study of the syntax of kindergarten and elementary school children, **O'Donnell** (1967) studied the speech and writing of children in kindergarten and grades 1, 2, 3, 5, and 7. Oral and written language samples were collected in grades 3, 5, and 7 with oral language samples collected for grades 1 and 2. **O'Donnell** used the **Hunt** (1965) method of analysis, the *"T unit."* It was found that in both oral and written discourse the total length of responses increased with every advance in grade level, with oral compositions longer than written compositions. It was also observed that the fastest progress in the development of oral expression appears to occur in the time span between kindergarten and the end of seventh. Distinct and dramatic differences were found in the syntax of speech and writing in all three grades from which writing samples were collected. Differences which appeared in grade 3 indicated weaker control in writing than in speaking. In grades 5 and 7, the control of syntax was greater in writing

than in speech. Support of this trend is noted in the findings of **Lull** (1929) who reported that children at the fifth-grade level wrote better than they spoke and **Harrell** (1957) who concluded that children between the ages of 9 and 15 demonstrated greater control of syntax in writing than in speech. No evidence of linguistic superiority of girls over boys at comparable ages was reported in this study which confirms more recent accounts which differ from earlier reports on children's language. **O'Donnell** concludes *"it seems possible that changes in social, cultural, and educational environments have reduced differential behavior of the sexes"* (99). The finding that the first-grade year was one of rapid and extensive development in exploiting language structures bears particular implication for the present study.

Riling (1965) analyzed the structure of children's written and spoken language in the fourth and sixth grades compared with the language of their textbooks. The results of the study were compared with those obtained in a similar study conducted by **Strickland** (1962). The written language samples were obtained by displaying a colorful picture to the children and instructing them to write any story *"the picture made them think of"* (43). The oral language samples were obtained through individual recordings of the children's stories in response to a picture. The samples were analyzed according to the method used by **Strickland** (1962) and **Loban** (1963). Of the 17 conclusions **Riling** draws from the study, the following are selected: (1) Children of grade 4 use all the basic language structures and most of them show variation in the structures of their written language: (2) Children's awareness of the part though processes play in writing is evident in their use of structures in written language which they do not use to any extent in oral language. **Riling** suggests further investigation of the association between structure and purpose of language to determine grade level

expectations of mature language and the possibility of mandatory structures for expressing certain ideas. She also suggests an investigation of the relation between fluency in the use of language and the degree of self-criticism children have developed. This was suggested earlier in the results of the **Witty** and **Martin** (1957) study. **Riling's** proposal for research in the relationship between the oral and written language of a child with respect to language development appears to be not only relevant, but a point of departure, to the present study.

The following studies compare spoken and written language as represented in reading materials and bear implications for the relationship between the child's oral and written language. **Carteret** and **Jones** (1965) sought to determine to what extent the redundancy of the language affects the difficulty of learning verbal materials for children of several ages. Samples of spoken language of children of first, third, and fifth grade, as well as adults (represented by Junior College students) from similar socioeconomic backgrounds were collected by means of a tape recorder. Samples of written language for the same age grouping were also collected to determine the trend of redundancy, and the preference of children for more or less redundancy, as well as to compare the uniformity of the material for the various grade levels of concern. The experimental study of the affect of redundancy upon a verbal learning task similar to the task of reading was also conducted. The investigators found that children apparently prefer less redundancy than occurs in their readers. Two implications are derived from the data of the statistical study: (1) that six-year-old speech is very close to mature speech--a finding which is in agreement with the majority of studies of many aspects of child language; (2) there are large and significant differences between spoken and written language and these differences should be explored in further detail. The investigators

concluded, on the basis of the statistical and experimental studies that *"it is no longer possible to entertain the theory that written language is merely a translation of natural spoken language into visual symbols"* (64). Written language they contend, is a different language and the techniques necessary to teach it effectively must be different. It is explained that in so far as aural language is to be used as a guide, the nature of the spoken language should be analyzed and *"bridges built"* (64) from it to the written language to show relationships where they exist. The investigators suggest that techniques for effective teaching therefore, should be different for written and spoken languages. The suggestion of *"building bridges,"* it appears, may be applied to medium as well as method in instructional techniques.

Jones (1966) describes three approaches to the problem of understanding language development and the relationships between spoken language and written language. The first approach deals with hesitation phenomena as indicators of encoding units. The points in speech at which people hesitate are presumed to be points of indecision requiring extra processing time. It was proposed that an analysis of hesitation phenomena in children's speech and a comparison with the results with those found for adults would determine possible differences in points of indecision and in encoding units. The first approach, Jones describes, relates directly to the ultimate goal of understanding the types of psycholinguistic units and their relation to verbal ability and to the second goal of understanding the role of the units of natural language in learning to read. The identification and analysis of hesitations in children's speech as related to that of adults was expected to indicate how psycholinguistic units develop as the native language is mastered. The second approach examines the use of context in comprehension of language. Reference is made to **Goodman's** (1965) findings that

early readers are able to recognize many more words in the context of a story than they can recognize in lists. The third approach is concerned with false recognition as a limiting factor in reading skill. In an earlier experimental study **Jones** and **Carteret** (1966) found that errors of false recognition behaved quite differently from ordinary failures to recognize. The later Jones-Carteret study indicated that first graders have a bias in favor of errors of commission or *"false alarms"* (40).

Ruddell (1965) investigated the effect of the similarity of oral and written patterns of language structure on the reading comprehension of fourth-grade children. The six reading passages were written for the study by utilizing patterns of language structure in the same proportional frequency in which they occurred in the oral language of fourth-grade children. The **Strickland** (1962) data was used as the basis for the frequency values. Cloze comprehension tests were used which were constructed for each of the reading passages. **Ruddell** concludes from the analysis of the data that *"reading comprehension is a function of the similarity of patterns of language structure in the reading material to oral patterns of language structure used by children"* (273).

Weaver (1967), in determining differences in encoding and decoding messages, attempted to determine the relationship between language production and language interpretation. **Weaver** explains that at the level of the *"sign vehicle"* or the physical form, particular signals are the same whether transmitted or received but it is in the interpretive system that differences appear. **Weaver** explains that in an analysis of language a *"communications model"* is complicated by the fact that one unit, i.e., the person, is both source, transmitter, receiver, and destination of messages. **Weaver** found that the subject transmits and receives his own message by his *"language"* cue system.

It seems likely that a *"cue"* system at the primary level of language could be represented in the compatibility of language forms.

Studies of the Oral and Written Language of Exceptional Children

In an examination of the language achievements of mentally retarded children, **Durrell** and **Sullivan** (1958) found that although primary-grade children were fairly competent in speaking and oral recall, written expression is the weakest language ability. These findings emphasize the difficulty of the task as compared with speaking.

Simmons (1962) analyzed differences between spoken and written language of deaf and hearing children and related them to chronological age. Five written compositions and one spoken composition of 54 deaf children enrolled at a school for the deaf and 112 hearing children attending regular schools in two suburban communities, were studied for developmental trends and syntactical features. The compositions were stimulated by six pictures of four sequences each which required narrative expression. In an analysis of the written and spoken stories, it was found that the deaf children used about the same number of words as the hearing, to write and speak more sentences than did the hearing group. The deaf children wrote and spoke more simple sentences than did the hearing children, although there was great similarity found between the groups on more complex forms of sentences. These results resemble those described by **Heider** and **Heider** (1940) and **Myklebust** (1960). **Simmons** also used the Type Token Ratio (TTR), the measure of vocabulary diversity formulated by **Johnson** (1944) to determine flexibility or rigidity in word usage. **Simmons** reported that the written and spoken TTR's of the hearing children were higher than those of the deaf, and the spoken TTR's of the deaf group were higher than their written. It was found that *"the deaf children tended to follow the same pattern as the hearing, but*

with reduced ratios" (421). These findings appear to confirm the effect of the linguistic environment, and support **Lenneberg's** (1964) theory of natural sequence in language growth.

Variables in the Evaluation of Oral and Written Language

In this section studies are grouped according to the variables followed for the research on written language, including (a) topic, (b) mode of discourse, and (c) instructional program.

Topic. **Howell** (1956) investigated differences in compositions written and dictated by seven-year-olds using topics that grew out of shared experiences and those that were assigned. Following each writing experience each child dictated on the same topic about which he had written. It was found the children were able to write more running words and more different words about a shared experience than on an assigned topic whereas they dictated more on an assigned topic than about a shared experience. There were more running words, more different words, and more generalizations in dictated composition than in written composition but there were more generalizations per running words in the written composition. A significantly greater number of generalizations and of generalizations per hundred running words were found in compositions about shared experiences. The investigator concluded that seven-year-olds create longer compositions, use more extensive vocabularies, and express more generalizations when they are free from the mechanics of written expression. It was also observed that shared experiences are more conducive to generalizing than assigned topics.

Mode of Discourse. **Oftedal** (1948) observed that *"picture writing"* (37) with third-grade children was a way of bridging the gap between telling stories and writing

them. The stories were organized as a sequence of events and then the children *"read"* their stories from the pictures. Since the picture-written stories were superior in number of ideas, number of new ideas, amount of original fantasy, adequacy of vocabulary, length of story, length of sentences, and reduction of projection of past experiences, it was concluded that writing tends to inhibit the thought of young children. It seems significant that almost 20 years later, **Carteret** and **Jones** (1965) were recommending *"building bridges"* between oral and written language.

Anderson and **Bashaw** (1968) examined differences in mode of discourse of 92 first-grade students. Two descriptive themes and two argumentative themes from each subject were collected after ten-minute discussion periods. It was found that the argumentative discussion had little effect on the writing as compared to the descriptive discussion. The authors suggest that children may not benefit from the argumentative discussion at this age and stage of development. The stimuli concerned with descriptive responses were administered in the **Sandel** studies (1967, 1970) rather than statements of evaluation which as suggested here, involve higher thought processes.

Langdon (1961) initiated a program of "*intensive writing*" (18) in an attempt to encourage children to transfer the vitality of their oral expression into written expression. The approach channeled the children's imagination and enthusiasm of the spoken word into creative writing.

Instructional Program. **Levin** (1966) tested a curriculum unit which was designed to show the child the reasonableness of the relationship between writing and speech. The unit begins with an emphasis on language and the various codes that can be used to stand for language, including pictures and picture symbols. The use of the alphabet code is introduced after the child learns to communicate with written symbols.

The specific objectives of the unit, which was used in two kindergarten classes were given as follows: (1) There are different codes which can represent language; (2) To be meaningful, the symbols used in a code must be presented in a specified order; (3) To be useful, the meaning of the code symbols must be agreed on beforehand; (4) The code, to be useful, must be appropriate to the particular situation in which it is used; and (5) The use of letters to represent sound is the most efficient of the codes used to stand for language and one letter can stand for the same sound in many words. The results indicated that the children understood that codes stand for language and could handle codes effectively. These findings appear to support the purpose of the present study by indicating the children's ability to utilize symbolic language.

Further emphasis on the relationship between oral and written language can be found in *"primer writing"* (1) in Africa (Halverson, 1967) in which the linguistic features of the language and the correspondence of sound to symbol are noted as essentials. In preparing word frequency counts for both oral and written vocabulary, it was concluded that introducing most of the frequently used words comes about naturally when a text is based on natural language and idiom. The instructional program is therefore based on the oral and written language correspondence.

Emphasis on the language symbol system in its relationship to meaning was made by **Kendrick** and **Bennett** (1966) who investigated the relative effectiveness of the experience approach to the teaching of the Language Arts as compared with the traditional method, as measured in the achievement of first-grade pupils. The experience approach is described as one in which *"the language and thinking of the individual child constitute the basis for all skill improvement"* (90). **Van Allen** (1967) claims it maintains the children's *"language personality"* (483). The traditional method is

described as one *"which generally follows the sequence and division of topics dictated by the adopted materials with reading instruction usually separate from instruction in the other Language Arts areas, introduced before writing"* (95). It was reported that both boys and girls in the experience approach group excelled in the total number of words written and were superior to the traditional method group in ratio of the number of different words to the total number of words spoken. The investigators propose that justification for the experience approach is found *"in the theoretical position that the language symbol system used by children in listening, speaking, reading and writing, has meaning to the individual child only in terms of his own past experiences"* (89). This suggests, therefore, that the instructional program which systematically reinforces the close tie of the symbols (words) with individual and collective experience should enhance the development and expansion of meaning. The language-experience approach is used generally with children learning with the i.t.a. medium of instruction (Evertts 1969, Strickland 1969).

In proposing that the program in oral and written expression should utilize the known facts of child development that relate to the inherent problems in the teaching of speaking and writing, **McKee**, as early as 1944 offered the following implications which support the language-experience approach: (1) instruction should make use of the interests and concerns of the child; (2) the child's interest and need should be used as sources of motivation in learning; (3) a given speaking or writing activity should be introduced at a time when the pupil has need for engaging in that activity or what **Joos** (1961) calls *"the communication situation"* (4) the teaching should be introduced when the pupil has the experience and intellectual background for understanding and

learning; (5) the need for good speaking and writing in all school situations should be recognized with appropriate instruction.

Hildreth (1948) had recommended that each child's *"Linguability"* (547) be used as a guide and that all phases of language be advanced together so that all the skills reinforce one another. **Sir James Pitman** (1969) has also referred to *"writability"* (391) with reference to children's writing.

It was reported earlier in the research that **Miller** and **Ney** (1968) studied the effect of systematic oral language exercises on the writing of fourth-grade subjects. In this section the study is noted to reveal that a relationship between spoken and written language can be structured suggesting that oral language can be used to encourage written language production. Oral language drilling using exercises designed to foster transfer of training to writing were administered to 26 subjects in the experimental group. A normal course of studies was provided for 24 controlled students. The findings indicated that students who received the systematic oral language drilling wrote with greater freedom and facility; structures in their oral and written forms were used significantly more often by the subjects in the experimental group; oral and written practice of combining simple sentences into complex structures resulted in a greater number of complex sentences. These findings support those who claim that children's writing reflects the level of their reading and other language experiences (Strang, Harker, 1965). **Huey** in 1906, called for *"oral work in using English effectively for pupil's own purposes"* instead of *perfunctory written work with its excess of formula at the expense of spirit"* (369).

A language arts program in Samoa using television for the total instruction has been reported (Zilen and Thomas 1966). The lack of two-way communication with too

much emphasis on imitation has been acknowledged as a serious limitation of the program. The suggestion here, relevant to the present study, is that the child's independent oral or written expression directed to someone and eliciting a response, should be a more effective learning experience than reproducing language in either form.

To summarize, **Strickland** (1961) has stressed the relationship between oral and written language in terms of evaluation procedures, stating that since the quality of what is expressed in writing depends upon the quality of thinking that prompts it as expressed initially in oral language, any evaluation of written expression must be done with a consideration of the other two factors.

Summary of Criteria for Evaluation of Children's Oral and Written Language

In the study of child language development and behavior, the techniques used in measurement and the criteria employed in evaluation are basic in determining the types and accuracy of the obtained results. In reviewing the measures used in the reported research, it can be observed that while some measures have become traditional to afford comparison of studies, new techniques have been designed to assess discreet features of language which have been the focus of increasing recognition. The measures not specifically designed for evaluating the content or style of children's oral and written language but which can be applied to both oral and written language forms include:

1. **Length of response.** Length, independent of rate, in terms of word count, is described as an *"objectively identifiable characteristic of children's speech and writing"* (O'Donnell, et al., 1967). **Loban** (1963), **Hill** and **Hill** (1966), and **O'Donnell**, et al., (1967) considered the measure of total word count a significant variable in children's language production.

2. **Number and average length of sentence. Nice** (1925) introduced the use of the sentence in the evaluation of written compositions. The average length of sentences became a criterion of language maturity and has most recently been used in the studies of **Riling** (1965), **Hunt** (1965), **Strickland** (1962), and **Templin** (1957). The use of the sentence has however, been subject to question in language studies. **Fries** (1952) acknowledged 200 definitions of a sentence. **Siegers** (1933) described the sentence as *"an artificial or conventional device ... as punctuated by children obviously not an adequate measure"* (52). In the study by **Heider** and **Heider** (1940) for example, arbitrary rules of punctuating the children's writing were given, although the sentence

was not defined. In oral language, sentence definition may depend upon the voice quality or hesitation or be indistinguishable in transcription.

3. **The frequency of sentence types.** To three sentence types (simple, compound, and complex), **McCarthy** (1930) added the fourth *"elaborated sentence of two phrases, two clauses or a phrase and a clause"* (44). **Davis** (1937), **Day** (1932), and **Templin** (1957), used the **McCarthy** technique. Investigators of school children's written language have used classification of sentence types in evaluation (Bear 1939, Hoppes 1934, Heider and Heider 1940, Stormzand and O'Shea 1924, Johnson 1967,and Brotz 1969).

Although the difficulty of determining sentence types has been recognized because of children's tendency to use the conjunction and in joining groups of words in writing, and the prevalence of *"mazes"* **Loban** (1963) or unidentified units in speaking, **Smith** (1944) nevertheless, has stated that, *"the most significant measure of maturity in sentence structure in ability to sense the relationship between main and subordinate ideas as evidenced by the appropriate use of the complex sentence. Although children vary markedly in the age at which they begin to use complex sentences, use of this one construction is in general the best single criterion of maturity in expression"* (68). The problem of defining the sentence however, persists with this measure. **Templin** (1957) however, used the classification of sentence types in the longitudinal evaluation of children's oral language.

4. **The frequency and use of subordinate clauses.** In an attempt to overcome the difficulties of defining the sentence, **LaBrant** (1933) introduced the measure of *"subordination index"* in which sentence complexity is expressed by determining the ratio of finite predicates in subordinate clauses to the total number of finite predicates.

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This measure which eliminated the task of defining the sentence was used by **Harrell** (1957) in the comparative evaluation of oral and written language.

5. **Number of different words.** The criterion of variability in the use of words is considered an objective, although not a valid measure of vocabulary since the same word may serve several purposes (Smith 1941, LaBrant (1933). **Howell** (1956), **Winter** (1957), **Armstrong** (1965), and **Nelson** (1965) considered the number of different words in the evaluation of children's writing.

6. **The Type-Token Ratio - (TTR).** A more accurate estimate of word usage, adaptable to both oral and written language was designed by **Johnson** (1944) who defined the type-token ratio in terms of vocabulary flexibility or variability since it expressed the ratio of different words (types) to the total words (tokens) in a given language sample. **Mann** (1944) and **Chotlos** (9144) substantiated the validity of the type-token ratio in quantitatively differentiating samples of written language while **Fairbanks** (1944) applied it to samples of spoken language. **Loban** (1963) and **Simmons** (1962) used the TTR as indications of language maturity.

7. **The "communication unit" (Loban 1963) and "T-unit" (Hunt 1965).** These are measures which determine discreet features of language complexity or maturity. **Loban**, evaluating oral language, described the communication unit as *"every independent clause as well as material which precedes, separates, or follows it"* (6). **Hunt**, evaluating written language, described the T-unit as *the minimal, terminable unit which is minimal as to length and grammatically capable of being terminated with a capital letter and a period."* Both measures are useful in the evaluation of oral and written language since they provide for unpunctuated units of thought. **O'Donnell** (1967) used the T-unit in comparing oral and written language of kindergarten and

elementary school children. **Armstrong** (1965) and **Bortz** 91969) also continued T-units as an index of language maturity.

In the more recent edition of the handbook on *"Teaching Composition"* (Burrows 1966) several techniques for measuring growth in syntax are noted: (a) *"the number of different words, (b) the length of sentences, (c) the proportion of dependent clauses used and (d) the number of independent clauses with or without related dependent clauses"* (27). Only (a) and (c) were reported earlier (Burrows 1963). Since these procedures are acknowledged to be costly, informal evaluation by teachers through establishment of mutual rating systems is suggested. The recommendation for informal evaluation appears to have its corollary in a longitudinal study: *"A potential gold mine is available for research in accumulative records of samples of pupil writing over a period of a year or better still, of several years"* (29). The longitudinal study was cited by **Braddock** (1963) as especially appropriate for written composition in which change usually seems to take place slowly since this type of study follows the same individuals through a protracted period of time.

The criteria for evaluation selected for the longitudinal study which used consistent criteria through three years (Sandel, 1970) include those measures which appear to be most appropriate for application to both oral and written language samples of children in the primary grades. These criteria include: (1) number of running words, (2) number of different words,and (3) number of thought units which are designated to assess children's language development in terms of length, variability of vocabulary and density of communication.

Bibliography

Bear, M.V. (1939). Children's growth in the use of written language. Elementary English Review, 16 (7), 312-319.

Bortz, D.R. (1969). The written language patterns of intermediate grade children when writing compositions in three forms: descriptive, expository, and narrative. Bethlehem, PA: Lehigh University.

Braddock, R., Lloyd-Jones, R., Schoer, L. (1963). Research in written composition. Champaign, IL: National Council of Teachers of English.

Bruner, J.S. (1966). Toward a theory of instruction. New York: W.W. Norton.

Burrows, Alvina T. (1966). Teaching composition. What research says to the teacher, No. 18, 36p.

Carroll, J.B. (1964). Words, meanings, and concepts. Harvard Educational Review, 178-202 (b).

Chotlos, J.W. (1944). Studies in language behavior IV: A statistical and comparative analysis of individual written language samples. Psychological Monographs, 56, 77-111.

Davis, E.A. (1937). The development of linguistic skill in twins, singletons with siblings and only children from age five to ten years. Institute of Child Welfare Monograph Series, No. 14. Minneapolis: University of Minnesota Press.

Day, E. (1932). The development of language in twins: I. A comparison of twins and single children. Child Development, 3 (3), 179-199.

Dixon, J. (1967). Growth through English. Reading, England: National Association for the Teaching of English.

Dozier, E.P. (1963). The linguists approach to language with implications for language teaching and learning. In R. Strang (Ed.), Contributions of linguistics to reading. Symposium presented at the Second Annual Conference in Reading, University of Arizona, Tucson.

Eldredge, C.C. (1965). A study of the relationship between the oral and written composition of third grade children. Dissertation Abstracts, No. 66-2471, 875-A.

Fairbanks, H. (1944). The quantitative differentiation of samples of spoken language. Psychological Monographs, 56, (2), 19-38.

Fodor, J.A. & Katz, J.J. (1964). The structure of language. Englewood Cliffs, New Jersey: Prentice-Hall.

Harrell, L.E. (1957). A comparison of oral and written language in school-age children. Monographs of the Society for Research in Child Development, 22, 3.

Heider, F.K. and Heider, G.M. (1940). A comparison of sentence structure of deaf and hearing children. Psychological Monographs, 52 (1), 42-103.

Hockett, C.F. (1996). The problem of universals in language. In J.H. Greenberg (Ed.), Universals of Language, 2nd ed.) Cambridge: M.I.T. Press, 1-29.

Hoppes, W.C. (1934). Considerations in the development of children's language. Elementary English Review, 11 (3), 66-70.

Hunt, K.W. (1965). Grammatical structures written at three grade levels. National Council of Teachers of English Research Report No. 3. Champaign, IL: National Council of Teachers of English.

Hunt. K.W. (1966). Recent measures in syntactic development. Elementary English, (November) 732-739.

Johnson, W. (1944). Studies in language behavior: A program of research. Psychological Monographs, 56.

Johnson, L.V. (1967). Children's writing in three forms of composition. Elementary English, (March) 265-269.

Lamb, P. (Ed.) (1967a). Guiding children's language learning. Dubuque, Iowa: Wm. C. Brown.

Loban, W.D. (1963). The language of elementary school children. National Council of Teachers of English Research Report No. 1. Champaign, IL: National Council of Teachers of English.

Lull, H.G. (1929). The speaking and writing abilities of intermediate grade pupils. Journal of Educational Research, 20 (June), 73-77.

Martin, C. (1955). Developmental interrelationships among language variables in children of the first grade. Elementary English, 32, 167-171.

McCarthy, D.A. (1930). Language development of the preschool child. Institute of Child Welfare Monograph Series, No. 4. Minneapolis: University of Minnesota Press.

Nice, M.M. (1925). Length of sentences as a criterion of a child's progress in speech. Journal of Educational Psychology, 16, 370-379.

O'Donnell, Ray C.,William J. Griffin and Raymond C. Norris. (1967). Syntax of kindergarten and elementary school children. Champaign, IL: National Council of Teachers of England.

Piaget, J. (1926). Language and thought of the child. New York: Harcourt, Brace & World.

Potter, R.R. (1967). Sentence structure and prose quality: An exploratory study. Research in the Teaching of English, I (1), 21.

Riling, M.E. (1965). Oral and written language of children in grades 4 and 6 compared with the language of their textbooks. Cooperative Research Project No. 2410. Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education.

Ruddell, R.B. (1968). A longitudinal study of four programs of reading instruction varying in emphasis on regularity of grapheme-phoneme correspondences and language structure on reading achievement in grades two and three. U.S. Office of Education projects 3099 and 78085. University of California, Berkeley.

Sandel, L. (1967). A comparison between the oral and written responses of first-grade children in ITA and T.O. classes. U.S.O.E. Project No. 7-8220. Hempstead, NY: Hofstra University.

Sandel, Lenore. A comparison of oral and written language of third-grade children. Doctoral Dissertation, Hofstra University, New York, 1970.

Sapir, E. (1921). Language. New York: Harcourt, Brace & World.

Siegers, J.C. (1933). Form of discourse and sentence structure. English Review, 10, 51-54.

Simmons, A.A. (1962). A comparison of the type-token ratio of spoken and written language of deaf and hearing children. Volta Review, 417-421.

Stormzand, M. and O'Shea, M.V. (1924). How much English grammar? Baltimore: Warwick & York.

Strong, R., & Hocker, M.E. (1965). First-grade children's language patterns. Elementary English (January), 38-41.

Strickland, R.G. (1962). The language of elementary school children: Its relationship to the language of reading textbooks and the quality of reading of selected children. Bulletin of the School of Education, Indiana University. Bloomington: Indiana University, 38 (4).

Templin, M.C. (1957). Certain language skills in children: Their relationship and interrelationships. Institute of Child Welfare Monograph Series, No. 26. Minneapolis: University of Minnesota Press.

Vygotsky, L.A. (1962). Thought and Language. Cambridge, MA: MIT Press.

Weaver, W. W., & Bickley,A.C. (1967). Some differences in encoding and decoding messages. Paper presented at the American Educational Research Association Convention, New York, (February).

Whipp, L. (1969). The child as language teacher. Elementary English, (April), 466-470.

Winter, C. (1957). Interrelationships among language variables in children of the first and second grades. Elementary English, 34, 108-113.

Zilen, E., & Thomas,W.A. (1966). Teaching language arts in Samoa. Elementary English, (November), 730-731, 791.

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